

**WATER ALLOCATION PROGRAM DEVELOPMENT
STREAMFLOW STANDARDS SUBCOMMITTEE MEETING**

MINUTES OF MEETING

January 14, 2003

Present: Alicia Good, Jim Marvel, Steve Donohue, Eugenia Marks, Harold Ward, Eugene Pepper, Katherine Fisher, Ralph Abele, Christine Lipsky, Kathy Crawley, Connie McGreavy, Rich Blodgett, John Torgan, Elizabeth Scott, Carlene Newman, Alisa Richardson

Handouts:

by DEM:

- Copy of draft minutes to Dec. 10, 2002 meeting for approval
- draft copy of charge, marked with comments
- draft copy of charge with comments incorporated
- Flow Healthy Rhode Island Streams – a discussion
- Attachment A – a map of physiographic regions in NE
- Attachment B – a map of physiographic regions in RI
- Proposed RI Instream Flow standard – chart and graph
- Evaluations of proposed standard on 19 gages in RI - graphs

by WRB:

- Estimated Population on Wells vs. Public Water Supply

Approval of Minutes:

Meeting minutes from Dec. 10, 2002 meeting were accepted by the subcommittee

Charge of Subcommittee:

Comments were received by Katherine Fisher and Steve Donohue prior to the meeting. Alicia Good asked Mr. Donohue to explain the reasoning behind his comments to the group. He explained that his reason for participating in this subcommittee was to insure that any standard that was developed provides for maximum sustainable use of the State's waters. Ms. Good explained that the goal of this group is not to make sure we use every bit of water but to allow for maximum sustainable use of the water in a watershed. Therefore, DEM suggested that "provides for" be changed to "allows for". Mr. Donohue said it was fine with him.

The group discussed the phrase "and which allows for establishment of site specific standards". Kathy Crawley felt it was wordy and suggests "which establishes...". Ms. Good and Elizabeth Scott explained that this phrase explains that there is a state standard which gives way for site specific standards and implementation strategies for both; that the site specific standard could be developed as an alternative to the long term instream flow standard. Eugenia Marks suggested changing "which allows for establishment.." to "that allow site specific standards". All agreed. Ms Marks and Harold Ward had suggestions on sentence structure and grammar that we decided to deal with after the meeting.

Ralph Abele suggested that in keeping with the CWA we should flip the order in the first sentence. Mr. Donohue would prefer to leave it as is. Group decides to leave order as is.

The discussion moved to the issue of implementation at Ms. Good's suggestion. She explained that the phrase "implementation strategy" is not meant to refer to the allocation process, but is intended to capture how we are going to implement this standards i.e. interim standard for new users and some other mechanism for existing users. Discussion occurred on whether this group should get into allocation issues. Connie McGreavy said that it would be appropriate to make recommendations to the WAPAC. The group then discussed the role of the subcommittee in guiding DEM in implementation of instream flow standards. Mr. Donohue feels that the subcommittee is guiding the WRB with their decisions on water allocation. He does not want to be making regulatory decisions. Ms. Good re-explained that DEM had already started the process of developing an instream standard when WRB formed WAPAC. Since DEM would have pulled together a group similar to this one to develop a standard, it just made sense to fold it into the WAPAC process. It was decided to remove references to implementation and address these issues in the "objectives" section.

The group moved on to the "objectives." Discussion took place again on the role of subcommittee in relation to aiding DEM's effort on development of regulations for standard. It was decided that it makes sense for this process to serve dual purpose of providing WRB what it needs in the allocation process as well as DEM in the standards process. It must be clear that these are only recommendations to both agencies. Group decided to add bullet to address the implementation / recommendation issue for DEM and WRB. The bullet would read, "Develop recommendations on implementation of instream flow standards". After some discussion, group decided that the other 5 bullets were acceptable.

Discussion on Proposed RIABF to answer questions raised in past meetings:

Alisa Richardson explained that the gages used to determine rivers that were considered flow healthy were those with adequate periods of record. DEM decided to adapt USFWS ABF to conditions in RI. RI rivers are not as large as in northern NE. Colin Apse suggested use of median of monthly medians instead of the median of monthly means which is what USFWS did. This statistically better addresses the smaller streams and how they respond to large storms. In developing standard DEM wanted to determine which streams were flow healthy i.e. those that are not significantly impacted by withdrawals or other flow alterations. Using the USGS Low Flow report and the 7Q10 equation, which represents the potential 7Q10, the potential 7Q10 was compared to the river's actual 7Q10 flow (derived from long-term flow record). Those that were within 20% of the potential 7Q10 were considered flow healthy. Those between 20 and 100% were flow threatened. Those with > 100% difference were considered flow critical. All those that are flow healthy were used in development in standard.

It was noticed that there were no flow healthy streams in the northwest portion of state. In researching this it became evident that the geology is different in this area (map from publication by USGS); the stratified drift and till is not as deep therefore providing less base flow. This area is defined at the 120m above sea level mark. The topography was overlaid with the groundwater reservoirs and there is an almost perfect correlation except in the East Bay area. This area should be treated similarly as the northwestern part of the state. Gages in northwestern RI that were considered flow threatened and had no known withdrawals were also used in the calculations for the RIABF.

Ms. Richardson explained that today's handout of the proposed RIABF is slightly different from what was handed out in a previous meeting. The original calculations included the gage on the main stem of the Pawtuxet River, which is influenced by the 3 wastewater treatment plants. Ms. Richardson explained that using a monthly standard instead of seasonal standard better mimics the natural flow regime. Ms. Marks stated that she is satisfied with what is presented but feels we need to be concerned with the upper reaches of the rivers because of wildlife populations. Ms. Richardson explained that this standard is a factor per square mile so it can be applied anywhere in the watershed.

Ms. Good suggested that this was a good stopping point as it was 11:30AM. She told the group that if they had any other material they wanted covered in the next meeting to please let Ms. Richardson know. Ms McGreavy explained that the WAPAC wants each subcommittee to develop a prioritized task list so a work plan can be developed.

Next meeting

Next meeting scheduled for February 12, 2003 at 1:00PM in room 280 at DEM